

## PHRENOLOGY

In 1808, the German anatomist Franz Gall unveiled a brand new theory on how brains function. He believed that the shape of a person's head is directly linked with the person's behavior. Gall observed his patient's behaviour, and mapped the features (like lobes and ridges) of their skull, attempting to find correlation between prominent parts of their head and prominent aspects of their behavior.

Gall believed that the brain was made up of many parts which served as the intellectual and moral center of a person. That meant certain parts of the brain were bigger or smaller, depending on how much the person developed them. Gall called this theory "craniology" but over time it was eventually known as "phrenology". It became popular with large numbers of people but soon became controversial within medical circles.

In later years, the practice of phrenology would be discredited. It is now considered a useless, and racist, method of medical diagnosis or treatment. **Although often labeled as quackery, it is better described as a scientific discovery that was disproved.** Quackery does not necessarily care about the treatments effectiveness, instead focusing more on the ability to sell the treatment for a profit.

Phrenology was ultimately abandoned by all legitimate science and medicine practices.



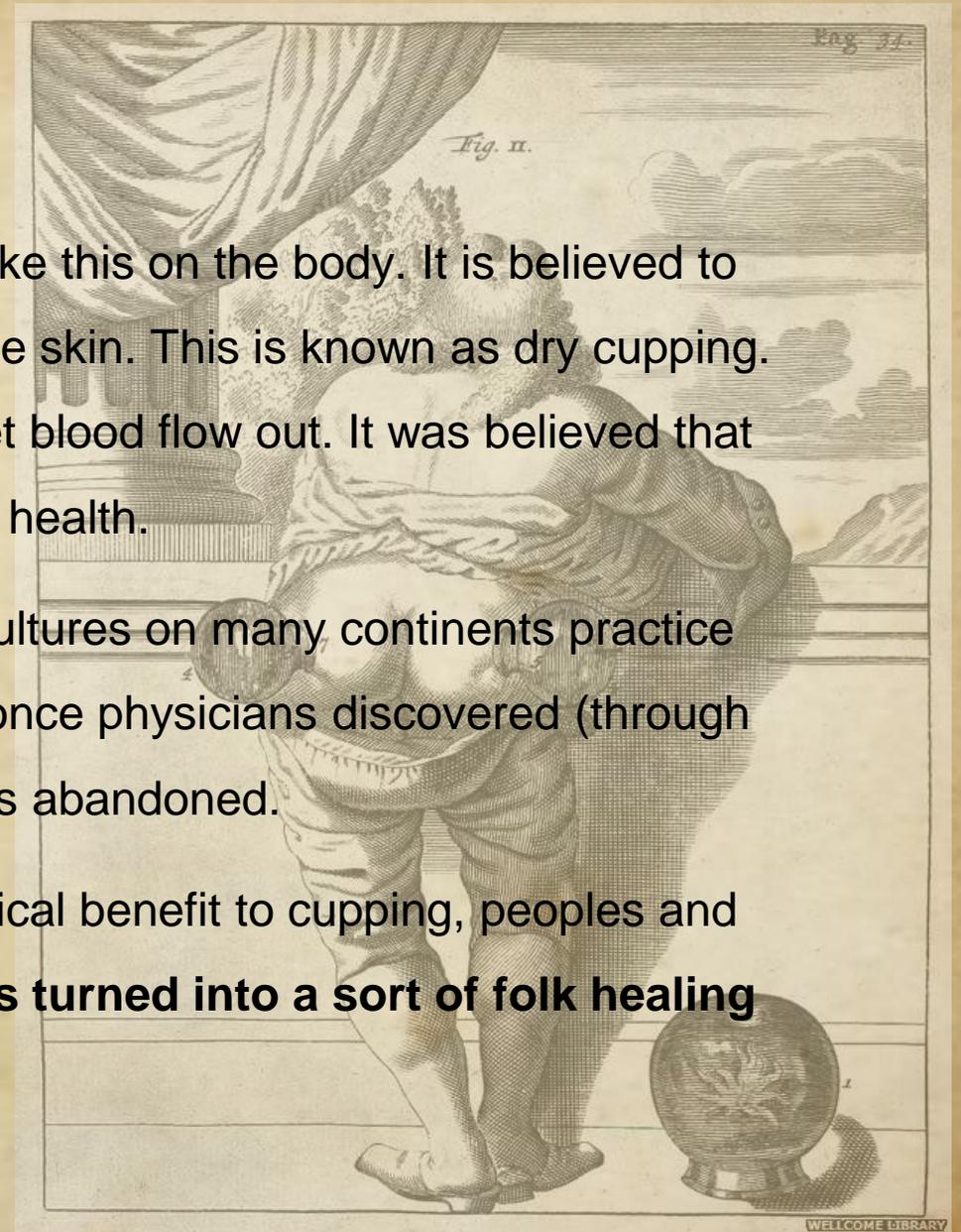


## CUPPING

Cupping is the practice of placing heated cups or vessels like this on the body. It is believed to draw out any impurities and bring blood to the surface of the skin. This is known as dry cupping. Wet cupping is when the welts left on the body are cut to let blood flow out. It was believed that this would re-balance the humours and restore a person to health.

It is unclear where the practices of cupping began. Many cultures on many continents practice cupping for religious, spiritual and medical purposes. But once physicians discovered (through further analysis) that cupping is ineffective, the practice was abandoned.

It is important to note that although there is no proven medical benefit to cupping, peoples and cultures still cup today. **It is an ancient discovery that has turned into a sort of folk healing where cupping is more of a tradition than treatment.**





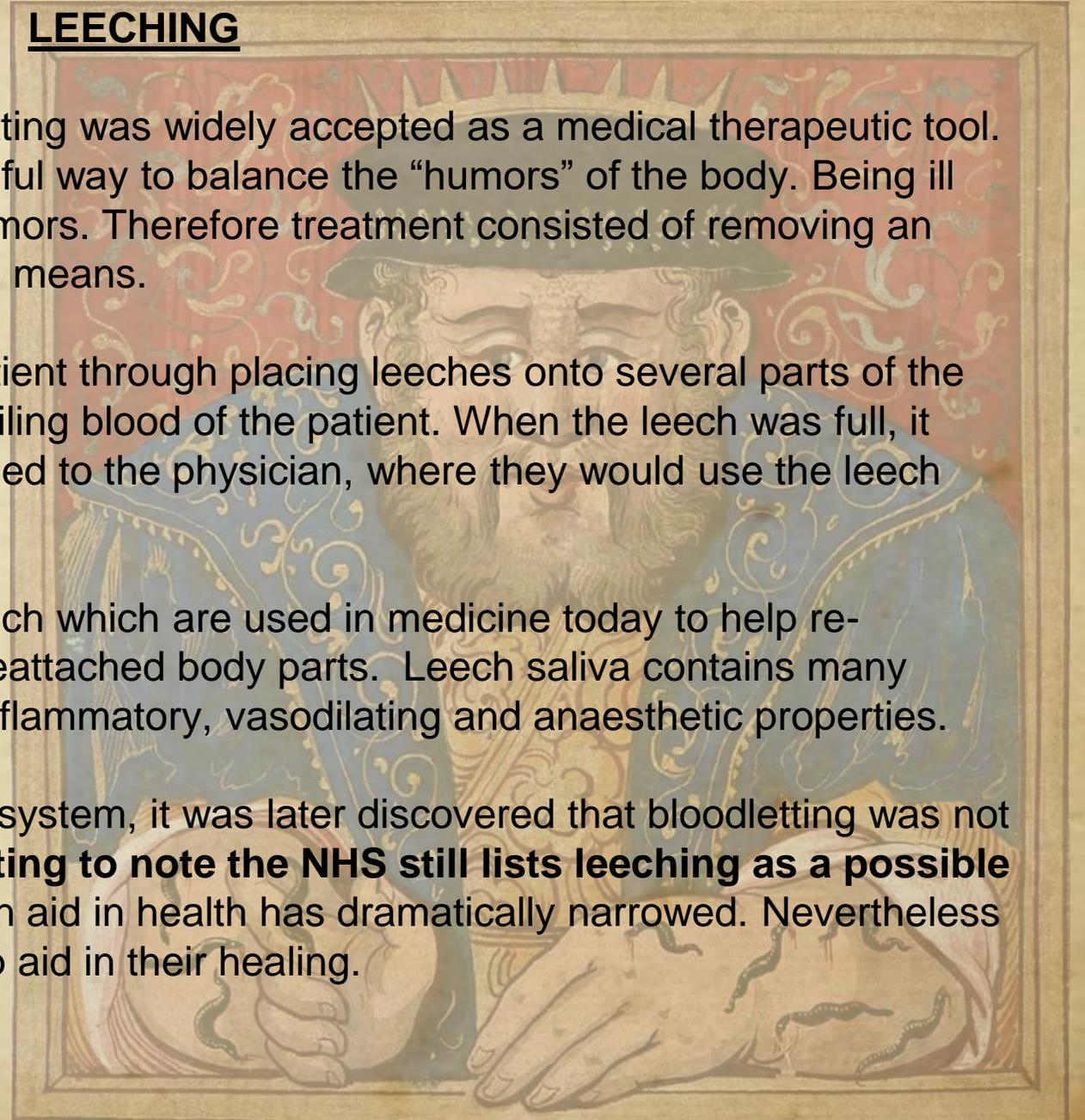
## LEECHING

From the 1700s to the late 1800s, bloodletting was widely accepted as a medical therapeutic tool. It was believed that bloodletting was a useful way to balance the “humors” of the body. Being ill meant having an imbalance of the four humors. Therefore treatment consisted of removing an amount of the excessive humor by various means.

One way was to remove the blood of a patient through placing leeches onto several parts of the body and allow the leech to suck out the ailing blood of the patient. When the leech was full, it would unlatch itself and normally be returned to the physician, where they would use the leech again on other patients.

There are several species of medicinal leech which are used in medicine today to help re-establish blood flow to skin grafts and to reattached body parts. Leech saliva contains many proteins which have anti-coagulant, anti-inflammatory, vasodilating and anaesthetic properties.

With continued research in the circulatory system, it was later discovered that bloodletting was not as helpful as other treatment. **It is interesting to note the NHS still lists leeching as a possible treatment**, but the list of what leeching can aid in health has dramatically narrowed. Nevertheless some patients still request leeching to help aid in their healing.





## MINERAL WATER and FAIRY WELLS

The method of healing through water has occurred since before time was recorded. Water is featured heavily in the art and artefacts of many ancient cultures and ancient religions all over the world. In Scotland, it is understood that multiple pre-Christian cultures used springs and waterfalls as a point of contact with supernatural spirits and creatures that possessed great power. It would be common for Picts or ancient clans to visit a spring and leave an offering behind to tempt the spirits to answer their prayers.

After the spread of Christianity in Scotland, these springs were re-purposed as miracle wells and were given the name of Christian saints, and purported the same healing powers as before.

From the advent of “mineral” wells and springs early physicians would, once again, re-label the same wells as medicinally healing because of microscopic materials in the water. People would travel around the globe to sample special mineral waters that were prescribed to them by their physician.

Today, the understanding of water as a portal between worlds or a conduit of magical healing and restoration is a matter of personal belief. But any physician would tell you to drink water regularly, as hydration is an essential element of the body’s ability to produce new cells. Water is also essential in aiding digestion.



## QUACKERY

A quack is a person who pretends to use medical methods that do not work and are only intended to make money. They are also known as Pretenders, Charlatans, Mountebanks. In the Highlands of Scotland, they were once called “the great evil.” Quacks were, and are, dangerous. Quack products would present themselves as a cure-all. What it “cures” will be non-specific, therefore any ailing person could be a customer. Often, the quack’s “nostrum” would contain little or no medicine, but would be packed with useless chalk powders or fish oil to mask the taste. It is discovered, too late, that the “cure call” cures nothing-at-all.

**Quacks are only interested in making money, and will only stop promoting a product once the interest has dissipated. There is no need for any study on the effectiveness of the treatment, because effectiveness does not matter.** The reasoning behind the effects of the “nostrum” will often contain the word “magical” or “miracle.” The person prescribing the quack product will be sold by a company or person with a vague history of “Shaman” or “natural materials” but do not specify further.

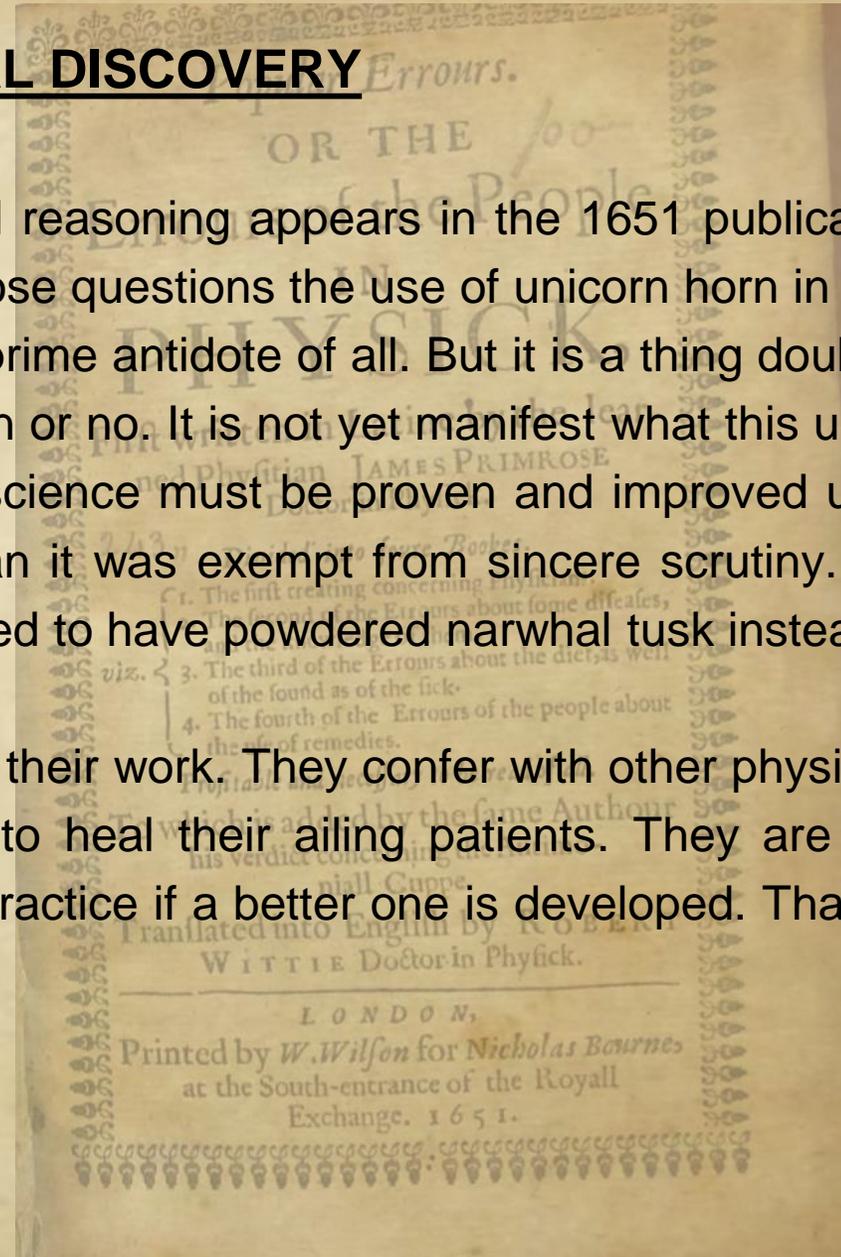
Quacks have been around for as long as physicians. And they still exist today. Although it seems bizarre many people, then and now, have died from the dangerous effects of a quack’s treatment. Either because of the dangerous ingredients in the quack’s “nostrum” or because the ailing person considers the treatment an “alternative” to medicine, and ignores the warnings of medical professionals.



## SCIENTIFIC and MEDICAL DISCOVERY

Probably one of the best examples of scientific and medical reasoning appears in the 1651 publication “The Errours of the People in Physik” where physician James Primrose questions the use of unicorn horn in medicine. He says “It can scarcely be said... that the unicorn horn be the prime antidote of all. But it is a thing doubted of by many not without good reason, whether there be any such horn or no. It is not yet manifest what this unicorn is!” Physicians, even 350 years ago understood that all medical science must be proven and improved upon. And even though something was commonly held belief didn’t mean it was exempt from sincere scrutiny. Medicine with “powdered unicorn horn” as an ingredient was later revealed to have powdered narwhal tusk instead.

Physicians today apply rigorous study and experimentation to their work. They confer with other physicians and scientists to develop the most effective tools and practices to heal their ailing patients. They are willing to abandon what was previously believed to be sound scientific practice if a better one is developed. That is how it was 350 years ago. That is how it is today.





## HUMORAL THEORY



*This information was largely written by medical historian Faith Lagay in the publication "The Legacy of Humoral Medicine"*

Humoral medicine is the belief that health and its opposite, dis-ease, were due to complex interactions among a person's 4 internal humors, their lifestyle and habits, and their environment.

The 4 humors corresponded in their natures to earth, air, fire, and water—the 4 elements of which all matter was composed. Blood was hot and wet like air; phlegm was cold and wet like water; yellow bile was hot and dry like fire; and black bile was cold and dry like earth. Health consisted in humoral equilibrium. Illness resulted when too much or a too little occurred in one or more of the humors. The disturbance could result from overindulgence in food or drink, too much or too little physical exertion, or changes in the so-called "naturals," Because of the similarity of the natural elements and humors, certain humors were more likely to become excessive during given seasons of the year. Phlegm increased during the winter, bringing with it bronchitis and pneumonia because phlegm was cold and wet, like the chilly Mediterranean winters. In warm, wet spring, hot, wet blood increased, causing dysentery and nose bleeds.

The physician's task was to diagnose which humor was out of balance; treatment then focused on restoring equilibrium by diet or by reducing the offending, out-of-balance humor by evacuating it. After the invention of clinical trials, this practice was phased out over 200 years and completely abandoned by the discovery of the germ at the turn of the 19th century.



